

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method comprising:
forming a dielectric layer comprising a matrix material with a plurality of pores and porogen material within the pores;
removing at least some of the porogen material from at least some of the plurality of pores; and
wherein the porogen material comprises a material selected from a group consisting of ~~polyethylene terephthalate, polyamide 6,6, syndiotactic polystyrene, polyacrylonitrile, polypropylene oxide, polyphenylene sulfide, and polyamideimide, polyphthalimide, polymethylstyrene, polyetheretherketone, polyether sulfone, polyoxymethylene, polybutylene terephthalate, and polystyrene.~~
2. (original) The method of claim 1 wherein removing at least some of the porogen material comprises thermally decomposing at least some of the porogen material.
3. (original) The method of claim 2 further comprising depositing a thin film at a deposition temperature.
4. (original) The method of claim 3 wherein the porogen material has a thermal decomposition temperature higher than the deposition temperature.
5. (original) The method of claim 4 wherein the deposition temperature is about 300 degrees Celsius or lower.
6. (original) The method of claim 2 wherein the porogen material has a thermal decomposition temperature lower than a thermal decomposition temperature of the matrix material.

7. – 15. (canceled)

16. (currently amended) A method comprising:

forming a dielectric layer comprising a matrix material with a plurality of pores and porogen material within the pores;

forming a trench in the dielectric layer;

filling the trench with a conductive material, the filling being performed at a filling temperature;

removing at least some of the porogen material from at least some of the plurality of pores; and

wherein the porogen material comprises a material selected from a group consisting of polyethylene terephthalate, polyamide 6,6, syndiotactic polystyrene, polycaprolactone, polypropylene oxide, polyphenylene sulfide [I,I] and polyamideimide, polyphthalamide, polymethylstyrene, polyethretherketone, polyether sulfone, polyoxymethylene, polybutylene terephthalate, and polystyrene.

17. (original) The method of claim 16 wherein the porogen material has a thermal decomposition temperature higher than the filling temperature and lower than a thermal decomposition temperature of the matrix material.

18. (canceled)

19. (currently amended) The method of claim 17 wherein the matrix material comprises a material selected from a group consisting of cross-linked polyphenylene, polyaryl ether, polystyrene, crosslinked polyarylene, polymethylmethacrylate, aromatic polycarbonate, aromatic polyimide, methyl silsesquioxane, and hydrogen silsesquioxane.

20. – 23. (canceled)

24. (previously presented) The method of claim 1 wherein the porogen material comprises polybutylene terephthalate.
25. (previously presented) The method of claim 1 wherein the porogen material comprises polyphenylene sulfide.
26. (new) The method of claim 16 wherein the porogen material comprises polybutylene terephthalate.
27. (new) The method of claim 16 wherein the porogen material comprises polyphenylene sulfide.